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EXAMINER	
SHELEHEDA, JAMES R	

ART UNIT	PAPER NUMBER
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/633,778	TAKEUCHI, KOICHI	
	Examiner	Art Unit	
	James Sheleheda	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 November 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,6-11,14-16,19,20 and 25-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,6-11,14-16,19,20 and 25-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 16 is objected to because of the following informalities:

In claim 16, "the program number" should be changed to --a program number-- as there is no previous recitation of this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 6, 8-11, 16, 20, 25, 27-30, 33, 35, 36 and 38-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blatter et al. (Blatter) (6,016,348) (of record) in view of Ohishi et al. (Ohishi) (5,909,257) (of record).

As to claims 1 and 33, Blatter discloses a digital broadcast receiving system (Fig. 1), and corresponding method, comprising:

a **receive and demodulation section** (10, 15, 20 and 30 of Fig. 1) by which a digital broadcast signal received from the exterior is demodulated (column 3, lines 52-61) and outputted as a packet stream (column 3, lines 62-65 and column 4, lines 14-17);

a **packet filter** (PID selection unit, 47) that filters a predetermined packet in a plurality of packets composing said packet stream (column 9, lines 11-14);

a **storing unit** (storage device, 90 and storage medium, 105) by which said packet stream passing through said packet filter is stored (column 3, lines 38-44 and column 11, lines 40-43 and 64-67),

an **information table generator** (controller, 115) that generates, with respect to a first table (CAT table) in various information tables contained in said packet stream (received PSI tables; column 8, lines 18-23), a new first table (CAT table with the broadcast encryption code removed; column 8, lines 35-37 and column 9, lines 43-46) containing information only on a program to be stored in said storing unit (column 8, lines 8-11); and

an **information table substitution unit** (mux, 110) by which said new first table (CAT table within the new CPSI) is substituted for an information table corresponding to said first table contained in said packet stream transmitted (wherein the CPSI tables are substituted for the broadcast PSI tables; column 10, lines 58-65), said information table substitution unit being disposed between said receive and demodulation section and said storing unit (wherein received packets are passed through the mux to the storage device; column 10, lines 58-65; and see Fig. 1),

wherein said packet filter filters, of a plurality of PMTs contained in said packet stream transmitted (column 8, lines 18-23 and lines 38-43), an information table other than a PMT table related to said program to be stored (column 8, lines 49-61).

While Blatter discloses an information table generator which generates and substitutes a new table containing information on stored programs with the original table (CAT tables) and a PMT (column 8, lines 49-61),

he fails to specifically disclose wherein the first table is a PAT table, a specific value is substituted for the PID value of a packet for transmitting an ES described in the PMT, wherein said specific value is substituted for the PID value of a packet for transmitting a ES contained in said packet stream transmitted, and a recording section for retaining said specific value such that subsequent reproduction of said packet stream **may** be performed without first verifying the content of the PMT and PAT.

In an analogous art, Ohishi discloses a digital receiver (Figs. 2 and 16) wherein the PAT table is modified (column 8, lines 20-27) and wherein specific default values are substituted for the PID values of video and audio streams in a PMT (column 11, lines 35-42) to generate a new table (column 12, lines 5-14 and Fig. 18) which is recorded with the selected program (column 12, lines 11-14) such that subsequent reproduction of said packet stream **may** be performed without first verifying the contents of the PMT and PAT (as Ohishi's system does not require that the tables be verified in any way before reproduction of the program; column 12, line 34-column 13, line 26) for the benefits of ensuring that the PAT table only refers to programs which were recorded and are available for playback (Fig. 11a-e; column 7, lines 48-67 and column 8, lines 1-3 and lines 20-27) and eliminating the need to modify a plurality of tables by creating a single default table (column 12, lines 15-19).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Blatter's system to include wherein the first table is a PAT table, a specific value is substituted for the PID value of a packet for transmitting an ES described in the PMT, wherein said specific value is substituted for the PID value of a packet for transmitting a ES contained in said packet stream transmitted, and a recording section for retaining said specific value such that subsequent reproduction of said packet stream **may** be performed without first verifying the content of the PMT and PAT, as taught by Ohishi, for the benefits of ensuring that the PAT table only refers to programs which were recorded and are available for playback and eliminating the need to modify a plurality of tables by creating a single default table.

As to claim 11, Blatter discloses a digital broadcast receiving system (Fig. 1) comprising:

a **receive and demodulation section** (10, 15, 20 and 30 of Fig. 1) by which a digital broadcast signal received from the exterior is demodulated (column 3, lines 52-61) and outputted as a packet stream (column 3, lines 62-65 and column 4, lines 14-17);

a **packet filter** (PID selection unit, 47) that filters a predetermined packet in a plurality of packets composing said packet stream (column 9, lines 11-14);

a **storing unit** (storage device, 90 and storage medium, 105) by which said packet stream passing through said packet filter is stored (column 3, lines 38-44 and column 11, lines 40-43 and 64-67), wherein,

said packet filter filters, of said plurality of packets, packets other than a packet for transmitting the data related to a program to be stored in said storing unit (wherein all PSI packets unrelated to any particular program are filtered and stored; column 8, lines 38-45); and

said digital broadcast receiving system further comprising a first **recording section** (internal memory in controller, 115) for recording a program information index (full PSI of entire transport stream; column 8, lines 58-61) generated based on information contained in various information tables (individual PAT, PMT, NIT and CAT tables making up the PSI index; column 8, lines 58-61) which are extracted from said packet stream outputted from said receive and demodulation section (wherein the full PSI is a compilation of all received tables; column 8, lines 49-61),

wherein said program information index is different from said various information tables (wherein the compilation of the plurality of tables is different then the various individual tables),

an **information table generator** (controller, 115) that generates a new information table (CAT table with the broadcast encryption code removed; column 8, lines 35-37 and column 9, lines 43-46) with respect to a specific information table (received CAT table with encryption code; column 8, lines 35-37) in said various information tables filtered by said packet filter (received PSI tables; column 8, lines 18-23); and

an **information table insertion unit** (mux, 110) for inserting said new information table (CAT table within the new CPSI) to said packet stream transmitted

(wherein the CPSI tables are substituted for the broadcast PSI tables; column 10, lines 58-65), disposed between said receive and demodulation section and said storing unit (wherein received packets are passed through the mux to the storage device; column 10, lines 58-65; and see Fig. 1).

While Blatter discloses a program information index and an information table insertion unit, he fails to specifically disclose wherein a specific value is substituted for the PID value of a packet for transmitting an ES described in a PMT, wherein said specific value is substituted for the PID value of a packet for transmitting a ES contained in said packet stream transmitted and a second recording section for retaining the specific value such that subsequent reproduction of said packet may be performed without first verifying the contents of the PMT and a PAT.

In an analogous art, Ohishi discloses a digital receiver (Fig. 16) wherein specific default values are substituted for the PID values of video and audio streams (column 11, lines 35-42) to generate a new table (column 12, lines 5-14 and Fig. 18) which is then recorded (column 12, lines 11-14) such that subsequent reproduction of said packet stream **may** be performed without first verifying the contents of the PMT and PAT (as Ohishi's system does not require that the tables be verified in any way before reproduction of the program; column 12, line 34-column 13, line 26) for the benefit of eliminating the need to modify a plurality of tables by creating a single default table (column 12, lines 15-19).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Blatter's system to include wherein a specific value is

substituted for the PID value of a packet for transmitting an ES described in the PMT, wherein said specific value is substituted for the PID value of a packet for transmitting a ES contained in said packet stream transmitted and a second recording section for retaining the specific value such that subsequent reproduction of said packet may be performed without first verifying the contents of the PMT and a PAT, as taught by Ohishi, for the benefit of creating a single default table which eliminates the need to modify and store a plurality of tables for every recorded program.

As to claim 16, Blatter discloses a digital broadcast receiving system (Fig. 1) comprising:

a receive and demodulation section (10, 15, 20 and 30 of Fig. 1) by which a digital broadcast signal received from the exterior is demodulated (column 3, lines 52-61) and outputted as a packet stream (column 3, lines 62-65 and column 4, lines 14-17);

a packet filter (PID selection unit, 47) that filters a predetermined packet in a plurality of packets composing said packet stream (column 9, lines 11-14);

a record and reproduction unit (storage device, 90 and storage medium, 105) by which said packet stream passing through said packet filter is recorded (column 3, lines 38-44 and column 11, lines 40-43 and 64-67), and said recorded packet stream is reproduced and outputted (column 12, lines 61-65);

an information table generator (controller, 115) for generating a predetermined information table (CAT table with the broadcast encryption code removed; column 8, lines 35-37 and column 9, lines 43-46); and

an output information insertion unit (mux, 110) by which said predetermined information table (CAT table within the new CPSI) is inserted to said packet stream outputted to said record and reproduction unit, thereby to output it as a new packet stream (wherein packet stream contains the inserted CPSI tables; column 10, lines 58-65); and

a circuit changing switch (mux, 37; Fig. 1) that performs a selective switching between said packet stream outputted from said receive and demodulation section, and said new packet stream outputted from said output information insertion unit (wherein the selection is from switch 35 or the storage device; column 4, lines 44-49), thereby performing its transmission to a digital output section (application control unit, 70; column 7, lines 45-57).

While Blatter discloses wherein the generated information table (CAT table within the new CPSI) is inserted into the packet stream output to the record and reproduction unit and wherein said received packet stream does not conform to a predetermined standard (wherein the received packet stream is not MPEG compatible; column 11, lines 13-29), and said new packet stream is made to conform to said predetermined standard by inserting said predetermined information table (wherein the CPSI tables are created to conform with the MPEG standard; column 10, lines 16-24), he fails to specifically disclose wherein the information table is inserted into the packet stream output from the record and reproduction unit and wherein the PID value of a packet to be described is subjected to an arbitrary alteration and the value obtained by said alteration to said PID value is substituted for the PID value of a packet for transmitting a

ES contained in said packet stream transmitted, wherein, said information table generator has a function with which the value of the program number of a program recorded in said record and reproduction unit is subjected to an arbitrary alternation, to generate said predetermined information table and said output information insertion unit has a function with which the value obtained by said alteration to said program number is provided to said packet stream transmitted.

In an analogous art, Ohishi discloses a digital receiver (Fig. 2) wherein PSI tables for a program are stored (column 8, lines 34-38) and when stored programming streams are accessed (column 8, lines 4-8 and lines 34-41), PSI tables in the stream are modified (column 8, lines 20-27) and wherein default values are substituted for the PID values of video and audio streams pertaining to the particular program (column 11, lines 35-42) to generate a new table (column 12, lines 5-14 and Fig. 18) with is then recorded with the program (column 12, lines 11-14) for the benefit of enabling a the processor to modify the PSI tables for all the stored programming at once, instead of a separately for each stored program and for a program to be recorded without the need to modify a plurality of tables associated with the program (column 12, lines 15-19).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to further modify Blatter's system to include wherein the information table is inserted into the packet stream output from the record and reproduction unit and wherein the PID value of a packet to be described is subjected to an arbitrary alteration and the value obtained by said alteration to said PID value is substituted for the PID value of a packet for transmitting a ES contained in said packet

stream transmitted, wherein, said information table generator has a function with which the value of the program number of a program recorded in said record and reproduction unit is subjected to an arbitrary alternation, to generate said predetermined information table and said output information insertion unit has a function with which the value obtained by said alteration to said program number is provided to said packet stream transmitted, as taught by Ohishi, for the benefit of creating a single default table which eliminates the need to modify and store a plurality of tables for every recorded program.

As to claim 20, Blatter discloses a digital broadcast receiving system (Fig. 1) comprising:

a **receive and demodulation section** (10, 15, 20 and 30 of Fig. 1) by which a digital broadcast signal received from the exterior is demodulated (column 3, lines 52-61) and outputted as a packet stream (column 3, lines 62-65 and column 4, lines 14-17);

a **packet filter** (PID selection unit, 47) that filters a predetermined packet in a plurality of packets composing said packet stream (column 9, lines 11-14);

an **information table generator** (controller, 115) that generates, with respect to a first table (such as a CAT table) in various information tables contained in said packet stream (received PSI tables; column 8, lines 18-23), a new table (CAT table with the broadcast encryption code removed; column 8, lines 35-37 and column 9, lines 43-46) containing information only on a program to be recorded or reproduced (column 8, lines 8-11); and

an **information table substitution unit** (mux, 110) by which said new table (CAT table within the new CPSI) is substituted for an information table corresponding to said first table contained in said packet stream transmitted (wherein the CPSI tables are substituted for the broadcast PSI tables; column 10, lines 58-65),

wherein said packet filter filters, of a plurality of PMTs contained in said packet stream transmitted (column 8, lines 18-23 and lines 38-43), an information table other than a PMT related to said program to be recorded or reproduced (column 8, lines 49-61).

While Blatter discloses an information table generator generating a PMT (column 8, lines 49-61) and an information table substitution unit, he fails to specifically disclose wherein the first table is a PAT table, a specific value is substituted for the PID value of a packet for transmitting an ES described in the PMT, wherein said specific value is substituted for the PID value of a packet for transmitting a ES contained in said packet stream transmitted, and a recording section for retaining said specific value such that subsequent reproduction of said packet stream **may** be performed without first verifying the content of the PMT and PAT.

In an analogous art, Ohishi discloses a digital receiver (Figs. 2 and 16) wherein the PAT table is modified (column 8, lines 20-27) and wherein specific default values are substituted for the PID values of video and audio streams in a PMT (column 11, lines 35-42) to generate a new table (column 12, lines 5-14 and Fig. 18) which is recorded with the selected program (column 12, lines 11-14) such that subsequent reproduction of said packet stream **may** be performed without first verifying the contents

of the PMT and PAT (as Ohishi's system does not require that the tables be verified in any way before reproduction of the program; column 12, line 34-column 13, line 26) for the benefits of ensuring that the PAT table only refers to programs which were recorded and are available for playback (Fig. 11a-e; column 7, lines 48-67 and column 8, lines 1-3 and lines 20-27) and eliminating the need to modify a plurality of tables by creating a single default table (column 12, lines 15-19).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Blatter's system to include wherein the first table is a PAT table, a specific value is substituted for the PID value of a packet for transmitting an ES described in the PMT, wherein said specific value is substituted for the PID value of a packet for transmitting a ES contained in said packet stream transmitted, and a recording section for retaining said specific value such that subsequent reproduction of said packet stream **may** be performed without first verifying the content of the PMT and PAT, as taught by Ohishi, for the benefits of ensuring that the PAT table only refers to programs which were recorded and are available for playback and eliminating the need to modify a plurality of tables by creating a single default table.

As to claim 30, Blatter discloses a digital broadcast receiving system (Fig. 1) comprising:

a **receive and demodulation section** (10, 15, 20 and 30 of Fig. 1) by which a digital broadcast signal received from the exterior is demodulated (column 3, lines 52-

61) and outputted as a packet stream (column 3, lines 62-65 and column 4, lines 14-17);

a **packet filter** (PID selection unit, 47) that filters a predetermined packet in a plurality of packets composing said packet stream (column 9, lines 11-14);

wherein,

said packet filter filters, of said plurality of packets, packets other than a packet for transmitting the data related to a program recorded or reproduced (wherein all PSI packets unrelated to any particular program are filtered and stored; column 8, lines 38-45); and

said digital broadcast receiving system further comprising a first **recording section** (internal memory in controller, 115) for recording a program information index (full PSI of entire transport stream; column 8, lines 58-61) generated based on information contained in various information tables (individual PAT, PMT, NIT and CAT tables making up the PSI index; column 8, lines 58-61) which are extracted from said packet stream outputted from said receive and demodulation section (wherein the full PSI is a compilation of all received tables; column 8, lines 49-61),

wherein said program information index is different from said various information tables (wherein the compilation of the plurality of tables is different then the various individual tables),

an **information table generator** (controller, 115) that generates a new information table (CAT table with the broadcast encryption code removed; column 8, lines 35-37 and column 9, lines 43-46) with respect to a specific information table

(received CAT table with encryption code; column 8, lines 35-37) in said various information tables filtered by said packet filter (received PSI tables; column 8, lines 18-23); and

an **information table insertion unit** (mux, 110), operatively connected to said receive and demodulation section (see Fig. 1), for inserting said new information table (CAT table within the new CPSI) to said packet stream transmitted (wherein the CPSI tables are substituted for the broadcast PSI tables; column 10, lines 58-65),

While Blatter discloses a program information index and an information table insertion unit, he fails to specifically disclose wherein a specific value is substituted for the PID value of a packet for transmitting an ES described in a PMT, wherein said specific value is substituted for the PID value of a packet for transmitting a ES contained in said packet stream transmitted and a second recording section for retaining the specific value such that subsequent reproduction of said packet may be performed without first verifying the contents of the PMT and a PAT.

In an analogous art, Ohishi discloses a digital receiver (Fig. 16) wherein specific default values are substituted for the PID values of video and audio streams (column 11, lines 35-42) to generate a new table (column 12, lines 5-14 and Fig. 18) which is then recorded (column 12, lines 11-14) such that subsequent reproduction of said packet stream **may** be performed without first verifying the contents of the PMT and PAT (as Ohishi's system does not require that the tables be verified in any way before reproduction of the program; column 12, line 34-column 13, line 26) for the benefit of

eliminating the need to modify a plurality of tables by creating a single default table (column 12, lines 15-19).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Blatter's system to include wherein a specific value is substituted for the PID value of a packet for transmitting an ES described in the PMT, wherein said specific value is substituted for the PID value of a packet for transmitting a ES contained in said packet stream transmitted and a second recording section for retaining the specific value such that subsequent reproduction of said packet may be performed without first verifying the contents of the PMT and a PAT, as taught by Ohishi, for the benefit of creating a single default table which eliminates the need to modify and store a plurality of tables for every recorded program.

As to claim 35, Blatter discloses a digital broadcast receiving system (Fig. 1), and corresponding method, comprising:

a **receive and demodulation section** (10, 15, 20 and 30 of Fig. 1) by which a digital broadcast signal received from the exterior is demodulated (column 3, lines 52-61) and outputted as a packet stream (column 3, lines 62-65 and column 4, lines 14-17);

a **packet filter** (PID selection unit, 47) that filters a predetermined packet in a plurality of packets composing said packet stream (column 9, lines 11-14);

a **reproducing unit** (storage device, 90 and storage medium, 105) by which said packet stream passing through said packet filter is reproduced (column 3, lines 38-44 and column 11, lines 40-43 and 64-67),

an **information table generator** (controller, 115) that generates, with respect to a first table (CAT table) in various information tables contained in said packet stream (received PSI tables; column 8, lines 18-23), a new first table (CAT table with the broadcast encryption code removed; column 8, lines 35-37 and column 9, lines 43-46) containing information only on a program to be reproduced by said reproducing unit (column 8, lines 8-11); and

an **information table substitution unit** (mux, 110) by which said new first table (CAT table within the new CPSI) is substituted for an information table corresponding to said first table contained in said packet stream transmitted (wherein the CPSI tables are substituted for the broadcast PSI tables; column 10, lines 58-65), said information table substitution unit being disposed between said receive and demodulation section and said reproducing unit (wherein received packets are passed through the mux to the storage device; column 10, lines 58-65; and see Fig. 1),

wherein said packet filter filters, of a plurality of PMTs contained in said packet stream transmitted (column 8, lines 18-23 and lines 38-43), an information table other than a PMT table related to said program to be reproduced (column 8, lines 49-61).

While Blatter discloses an information table generator which generates and substitutes a new table containing information on stored programs with the original table (CAT tables) and a PMT (column 8, lines 49-61),

he fails to specifically disclose wherein the first table is a PAT table, a specific value is substituted for the PID value of a packet for transmitting an ES described in the PMT, wherein said specific value is substituted for the PID value of a packet for transmitting a ES contained in said packet stream transmitted, and a recording section for retaining said specific value such that subsequent reproduction of said packet stream **may** be performed without first verifying the content of the PMT and PAT.

In an analogous art, Ohishi discloses a digital receiver (Figs. 2 and 16) wherein the PAT table is modified (column 8, lines 20-27) and wherein specific default values are substituted for the PID values of video and audio streams in a PMT (column 11, lines 35-42) to generate a new table (column 12, lines 5-14 and Fig. 18) which is recorded with the selected program (column 12, lines 11-14) such that subsequent reproduction of said packet stream **may** be performed without first verifying the contents of the PMT and PAT (as Ohishi's system does not require that the tables be verified in any way before reproduction of the program; column 12, line 34-column 13, line 26) for the benefits of ensuring that the PAT table only refers to programs which were recorded and are available for playback (Fig. 11a-e; column 7, lines 48-67 and column 8, lines 1-3 and lines 20-27) and eliminating the need to modify a plurality of tables by creating a single default table (column 12, lines 15-19).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Blatter's system to include wherein the first table is a PAT table, a specific value is substituted for the PID value of a packet for transmitting an ES described in the PMT, wherein said specific value is substituted for the PID value

of a packet for transmitting a ES contained in said packet stream transmitted, and a recording section for retaining said specific value such that subsequent reproduction of said packet stream **may** be performed without first verifying the content of the PMT and PAT, as taught by Ohishi, for the benefits of ensuring that the PAT table only refers to programs which were recorded and are available for playback and eliminating the need to modify a plurality of tables by creating a single default table.

As to claim 41, Blatter discloses a digital broadcast receiving system (Fig. 1) comprising:

a **receive and demodulation section** (10, 15, 20 and 30 of Fig. 1) by which a digital broadcast signal received from the exterior is demodulated (column 3, lines 52-61) and outputted as a packet stream (column 3, lines 62-65 and column 4, lines 14-17);

a **packet filter** (PID selection unit, 47) that filters a predetermined packet in a plurality of packets composing said packet stream (column 9, lines 11-14); and

a **reproducing unit** (storage device, 90 and storage medium, 105) by which said packet stream passing through said packet filter is reproduced (column 3, lines 38-44 and column 11, lines 40-43 and 64-67), wherein,

said packet filter filters, of said plurality of packets, packets other than a packet for transmitting the data related to a program to be reproduced (wherein all PSI packets unrelated to any particular program are filtered and stored; column 8, lines 38-45); and

said digital broadcast receiving system further comprising a **recording section** (internal memory in controller, 115) for recording a program information index (full PSI of entire transport stream; column 8, lines 58-61) generated based on information contained in various information tables (individual PAT, PMT, NIT and CAT tables making up the PSI index; column 8, lines 58-61) which are extracted from said packet stream outputted from said receive and demodulation section (wherein the full PSI is a compilation of all received tables; column 8, lines 49-61),

wherein said program information index is different from said various information tables (wherein the compilation of the plurality of tables is different then the various individual tables),

an **information table generator** (controller, 115) that generates a new information table (CAT table with the broadcast encryption code removed; column 8, lines 35-37 and column 9, lines 43-46) with respect to a specific information table (received CAT table with encryption code; column 8, lines 35-37) in said various information tables filtered by said packet filter (received PSI tables; column 8, lines 18-23); and

an **information table insertion unit** (mux, 110) for inserting said new information table (CAT table within the new CPSI) to said packet stream transmitted (wherein the CPSI tables are substituted for the broadcast PSI tables; column 10, lines 58-65), disposed between said receive and demodulation section and said reproducing unit (see Fig. 1),

While Blatter discloses a program information index and an information table insertion unit, he fails to specifically disclose wherein a specific value is substituted for the PID value of a packet for transmitting an ES described in a PMT, wherein said specific value is substituted for the PID value of a packet for transmitting a ES contained in said packet stream transmitted and a second recording section for retaining the specific value such that said reproducing unit may reproduce said packet stream without first verifying the contents of the PMT and a PAT.

In an analogous art, Ohishi discloses a digital receiver (Fig. 16) wherein specific default values are substituted for the PID values of video and audio streams (column 11, lines 35-42) to generate a new table (column 12, lines 5-14 and Fig. 18) which is then recorded (column 12, lines 11-14) such that subsequent reproduction of said packet stream **may** be performed without first verifying the contents of the PMT and PAT (as Ohishi's system does not require that the tables be verified in any way before reproduction of the program; column 12, line 34-column 13, line 26) for the benefit of eliminating the need to modify a plurality of tables by creating a single default table (column 12, lines 15-19).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Blatter's system to include wherein a specific value is substituted for the PID value of a packet for transmitting an ES described in the PMT, wherein said specific value is substituted for the PID value of a packet for transmitting a ES contained in said packet stream transmitted and a second recording section for retaining the specific value such that subsequent reproduction of said packet may be

performed without first verifying the contents of the PMT and a PAT, as taught by Ohishi, for the benefit of creating a single default table which eliminates the need to modify and store a plurality of tables for every recorded program.

As to claims 6, 25 and 36, Blatter and Ohishi disclose wherein, in said information table generator, a new CAT containing the encrypted state of said digital broadcast signal (CAT table with the broadcast encryption code removed; see Blatter at column 8, lines 35-37 and column 9, lines 43-46) is generated with respect to a CAT in said variety of information tables (received PSI tables; see Blatter at column 8, lines 18-23); and

in said information table substitution unit, said new CAT is substituted for a CAT contained in said packet stream transmitted (wherein the CPSI tables are substituted for the broadcast PSI tables; see Blatter at column 10, lines 58-65).

As to claims 8, 27 and 38, Blatter and Ohishi disclose a control section (system controller, 115) that controls the operation of receiving said digital broadcast signal (see Blatter at column 4, lines 30-37);

and an information table extractor (packet buffer, 60) by which, from said packet stream outputted from said receive and demodulation section (see Blatter at column 8, lines 45-47), a specific SI table in said various information tables is extracted to inform its contents to said control section (via a PSI interrupt; see Blatter at column 8, lines 48-56), and wherein,

said packet filter filters said specific SI table contained in said packet stream transmitted (see Blatter at column 8, lines 40-45).

As to claims 9, 28 and 39, Blatter and Ohishi disclose a timer (substitution timing signal) for controlling the transmission intervals of said various information tables (see Blatter at column 10, lines 66-67 and column 11, lines 1-6), when said information table substitution unit performs substitution of said various information tables (see Blatter at column 10, lines 66-67 and column 11, lines 1-6).

As to claims 10, 29 and 40, Blatter and Ohishi disclose wherein said information table substitution unit performs substitution of said various information tables (see Blatter at column 10, lines 66-67 and column 11, lines 1-6) at the maximum allowable transmission intervals specified for each of said various information tables (wherein every transmitted table is substituted with a new table; see Blatter at column 10, lines 66-67 and column 11, lines 1-9).

4. Claims 7, 14, 15, 19, 26, 31, 32, 34, 37, 42 and 43 rejected under 35 U.S.C. 103(a) as being unpatentable over Blatter and Ohishi as applied to claims 1, 11, 20, 30, 33, 35 and 41 above, and further in view of Freimann (6,604,243) (of record).

As to claims 7, 26, 34 and 37, while Blatter and Ohishi disclose an information extractor (packet buffer, 60) that extracts various tables contained in said packet stream transmitted (received PSI tables; see Blatter at column 8, lines 45-61); and

a recording section (internal memory in controller 115) that records information contained in the tables extracted by said information table extractor (see Blatter at column 8, lines 52-61); and wherein

said packet filter filters the tables contained in said packet stream (see Blatter at column 8, lines 40-45) which are extracted by said information table extractor (see Blatter at column 8, lines 45-47), they fail to specifically disclose wherein the information tables are a SDT table and an EIT table.

In an analogous art, Freimann discloses a set top box (110, Fig. 2) which will receive a plurality of service tables (column 4, lines 50-58 and column 5, lines 1-8) including SDT and EIT tables (column 4, lines 50-58 and column 5, lines 1-8) and format them (column 4, lines 50-58) for the typical benefit of utilizing service tables conforming to the Digital Video Broadcasting (DVB) standard (column 4, lines 50-58).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Blatter and Ohishi's system to include wherein the information tables are a SDT table and an EIT table, as taught by Freimann, for the typical benefit of operating a system which utilizes provided service tables which conform to the Digital Video Broadcasting (DVB) standard.

As to claims 14, 31 and 42, while Blatter and Ohishi disclose a program information index (PSI of transport stream contained in memory; see Blatter at column 8, lines 58-61), he fails to specifically disclose wherein the index includes a SDT table and an EIT table.

In an analogous art, Freimann discloses a set top box (110, Fig. 2) which will receive a plurality of service tables (column 4, lines 50-58 and column 5, lines 1-8) including SDT and EIT tables (column 4, lines 50-58 and column 5, lines 1-8) and format them (column 4, lines 50-58) for the typical benefit of utilizing service tables conforming to the Digital Video Broadcasting (DVB) standard (column 4, lines 50-58).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Blatter and Ohishi's system to include wherein the index includes a SDT table and an EIT table, as taught by Freimann, for the typical benefit of operating a system which utilizes provided service tables which conform to the Digital Video Broadcasting (DVB) standard.

As to claims 15, 32 and 43, Blatter, Ohishi and Freimann disclose wherein said program information index further contains information described in a BAT (see Freimann at column 4, lines 50-58 and column 5, lines 1-8).

As to claim 19, while Blatter and Ohishi disclose wherein when said new packet stream is transmitted from said output information insertion unit (wherein packet stream contains the inserted CPSI tables; see Blatter at column 10, lines 58-65) via said circuit changing switch (mux, 37; see Blatter at Fig. 1) to said digital output section (application control unit, 70; see Blatter at column 7, lines 45-57), information tables are multiplexed with said new packet stream (wherein the mux enters the new CPSI tables; see Blatter

at column 10, lines 58-65) and then outputted, they fail to specifically disclose wherein the tables are SDT and EIT tables.

In an analogous art, Freimann discloses a set top box (110, Fig. 2) which will receive a plurality of service tables (column 4, lines 50-58 and column 5, lines 1-8) including SDT and EIT tables (column 4, lines 50-58 and column 5, lines 1-8) and format them (column 4, lines 50-58) for the typical benefit of utilizing service tables conforming to the Digital Video Broadcasting (DVB) standard (column 4, lines 50-58).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Blatter's system to include wherein the tables are SDT and EIT tables, as taught by Freimann, for the typical benefit of operating a system which utilizes provided service tables which conform to the Digital Video Broadcasting (DVB) standard.

Response to Arguments

5. Applicant's arguments filed 09/23/05 have been fully considered but they are not persuasive.

a. In response to applicant's arguments on pages 21-23 in regards to the PMT tables of Blatter and Ohishi,

i. As indicated in the rejections above and the previous action, it is noted that it is in fact the ***Blatter*** reference which is relied upon to teach generating a new PMT table and substituting the old table with the new table (see the rejections above and the previous action). As admitted in

the rejections, Blatter does not specifically mention altering the PID values in the PMT table. Ohishi was relied upon to teach taking a PMT table and then substituting a specific value for the PID value when generating the new table. As Blatter, as the primary reference, already discloses receiving and storing a PMT table for recorded programs, the teachings of Ohishi are only relied upon in regards to the altering of PID values contained within the PMT. Utilizing the specific reasoning and benefit behind *altering the PID values indicated in the PMT tables* (see Ohishi at column 11, line 30-column 12, line 30 and the rejections above), it is the ***combination*** results in creating a new PMT for a recorded program (as indicated by Blatter) wherein the PID values are changed (as taught by Ohishi). Any additional teachings provided by Ohishi unrelated to this feature and benefit do not negate the resulting combination and benefits therein.

ii. As presented in the previous action, and to which applicant has in fact provided no response or rebuttal, is once again noted that Ohishi merely discloses taking a PMT table, altering the data to have new PID values and then putting the data into a new table (column 11, line 35-column 12, line 14). The mere fact that Ohishi gives the newly created table a new name (PSSI) does not negate the basic fact that this is the same table as the PMT and is utilized for the same purpose of identifying the PIDs where the video and audio of the program are located (see

column 11, line 35-column 12, line 14 and Figs.18 and 19). Applicant's arguments that Ohishi only teaches a "PSSI" table and thus not a "PMT" are not persuasive.

b. In response to applicant's arguments on page 21 that "The Office Action appears to ignore the fact that Blatter and Ohishi are directed to different purposes...", the examiner is not persuaded. Blatter and Ohishi are both specifically directed to modifying service tables to correspond to recorded programming.

c. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, and that there is no motivation to combine the references, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In this case, as indicated previously and in the rejections above, the altering of the PID values in a PMT table, as taught by Ohishi help provide the

explicit benefit of eliminating the need to modify a plurality of tables by creating a single default table.

d. In response to applicant's arguments on page 22 and 23, applicant is once again encouraged to see the previous action and the rejections presented above, where it has been repeatedly indicated how the current claim limitations are fully taught by the combination of Blatter and Ohishi. Applicant's indication that Blatter's modification of a CAT table was somehow utilized to reject a limitation referring to the PMT table is completely incorrect, as Blatter clearly teaches the use of the PMT (column 8, lines 8-61). As admitted in the action, Blatter did not specifically disclose altering PID values contained within the PMT. Ohishi was then introduced to teach altering PMT PID values and the benefit therein.

e. In response to applicant's arguments on page 23, in regards to the "PSSI" of Ohishi, see the rejections and (a)-(d) above.

f. On pages 26 and 27, applicant argues that Blatter's manipulation of the CAT table was somehow utilized to teach creating a new PAT table.

In response, it is noted that this feature has been newly added to the independent claims. Applicant is incorrect in asserting that a "CAT" table was never utilized to teach manipulating the "PAT", as this feature was never even required.

It is further noted that previous dependent claims did include a limitation in regards to modifying the PAT table. As this limitation was clearly indicated as being taught by Ohishi and *not* Blatter, applicant's argument is not convincing.

g. On page 26, applicant argues that the combination of Blatter and Ohishi fail to disclose a recording section that would enable subsequent reproduction of the packet stream without first verifying the contents of the PMT and PAT.

In response, it is noted that neither Blatter or Ohishi require any "verifying" of the PMT and PAT tables in any fashion whatsoever. As both Blatter and Ohishi disclose reproducing the packet stream (see Blatter at column 12, lines 61-65 and Ohishi at column 12, line 31-column 13, line 26) without any verifying step taking place, they clearly meet the claim limitation.

Further, it is noted that the claim language does not require the system to reproduce content *without* verifying the PMT and PAT, the claims only require that subsequent reproduction of said packet stream "*may*" be performed without first verifying the contents of the PMT and PAT. A computer system reproducing content utilizing PSI tables is clearly *capable* of performing the reproduction without verifying and would thus meet the current broad claim limitations.

h. In response to applicant's argument on page 27, in regards to claim 35, see the rejections and (g) above.

i. In response to applicant's argument on page 27 in regards to altering the PAT table, see the rejections and (f) above where it is clearly indicated that Ohishi is relied upon to explicitly set forth generating a new PAT as recited in the claims (see Ohishi at column 8, lines 20-27 and as indicated in the rejections above)

j. In response to applicant's argument on page 27, in regards to substituting a PID value of a packet, see the rejections and (a)-(d) above.

k. In response to applicant's argument on page 27, in regards to retaining the altered PID value and the verification step, see the rejections and (a)-(d) and (g) above.

l. On page 28, applicant argues that the full PSI is a table which is received intact and is not generated based on information contained in various information tables.

In response, Blatter specifically discloses wherein the PSI is made of a plurality of different tables (column 8, lines 18-37). These individual tables are each made of a plurality of packets which are received and buffered over time (column 8, lines 38-55). The PSI is clearly not received "intact" as the controller identifies and buffers each individual table over time to assemble the "full PSI" (column 8, lines 38-61).

m. On page 28, applicant further argues Blatter does not "generate" the PSI based on information contained in various information tables which are extracted from the packet stream, as Blatter merely buffers the PSI and performs no generation of a program index.

In response, Blatter specifically discloses forming the "full PSI" which is made of a plurality of smaller tables (column 8, lines 18-37 and lines 58-61). As Blatter will slowly extract the plurality of information tables over time to assemble the full PSI index, this clearly meets the claim limitation of generating the index.

n. In response to applicant's arguments on page 28, in regards to substituting a value in the PMT table, see the rejections and (a)-(d) above.

o. In response to applicant's argument on pages 28 and 29, in regards to retaining the altered PID value and the verification step, see the rejections and (a)-(d) and (g) above.

Further, applicant's general allegation that all conventional systems, such as Ohishi and Blatter, would require verifying the PMT and PAT and that only applicant's invention would not is not found to be convincing. Notwithstanding the fact that not only do both Ohishi and Blatter not disclose any sort of requirement to perform verification, it is noted that applicant's specification discloses that this supposed benefit arises from the fact that the PID values have

been altered and stored with known values (see page 45, lines 2-10). Thus the combination of Blatter and Ohishi, which perform the same function, would have the same capability as a result.

p. In response to applicant's arguments on page 29, in regards to generating the index, see the rejections and (m) above.

q. In response to applicant's argument on pages 28 and 29, in regards to retaining the altered PID value and the verification step, see the rejections and (a)-(d), (g) and (o) above.

r. In response to applicant's argument on page 29, that while Ohishi may disclose altering the PID value, he fails to disclose altering the program number.

In response, as indicated in the rejections above, Ohishi clearly indicates altering program numbers, as the alterations to the PID values, which correspond to individual programs, clearly meet the broad limitation of altering a program number. As there is actually no context or limitations which limit the program number in any fashion, the examiner is unsure as to why applicant feels that Ohishi does not disclose altering a program number. For example, column 12, lines 5-14 of Ohishi, clearly recite altering PID values for a program. These clearly qualify as "program numbers" as they are *numbers* corresponding to a *program*. As applicant does not even provide any specific argument as to *why*

Ohishi would not read upon the broad term of "program number", applicant's argument is not convincing.

s. In response to applicant's arguments on page 29 and 30, in regards to altering a PID value, see the rejections and (a)-(d) above.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sheleheda whose telephone number is (571) 272-7357. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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